

ABSTRACT

hTERT-stromal cells are capable of maintaining the functions of hematopoietic stem cells over the period of 4 weeks or longer; however, the rate of stem cell amplification is relatively low. Accordingly, this invention provides a method for further amplifying hematopoietic stem cells. Via introduction of Indian hedgehog (ihh) genes into the hTERT-stromal cells with the use of a retroviral vector, hTERT-stromal cells that allow overexpression of Indian hedgehog (ihh-stromal cells) are established. Use of such ihh-stromal cells can enhance the amplification of hematopoietic stem cells.